

# Christina Fire Station IAS

## *Land and Neighborhood Characteristics*

1. How and why is the location suitable for the proposed uses?

**Larger property for larger facility and more strategic location to serve the highest population amount. Also, this new site should be recognized on the map.**

2. What are, if any, the incompatibility and special efforts needed to minimize the differences in the proposed use with adjacent uses?

**South side of site abuts 7+ homes. Depth of site will enable lesser incompatibility. The station location will be closer to CR 540A. Stormwater will likely be located in the rear.**

3. How will the request influence future development of the area?

**The area is built out. This station will improve service to existing development and relieve the overburden on other stations located in growing areas.**

## *Access to Roads and Highways*

1. What is the number of vehicle trips to be generated daily and at the PM peak hour based on the latest Institute of Traffic Engineers (ITE)? Please provide a detailed methodology and calculations.

**Table 5**

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Maximum Permitted in the PD	Proposed Plan
4.57 ± acres			
Permitted Density	RL-4 3 du/ac SF = 13 units	INST-1 400 Student Elementary School	Fire Rescue Station Water Treatment Plant
Average Annual Daily Trips (AADT)	103	908	476
PM Peak Hour Trips	13	57	9

*Source: Polk County Concurrency Manual*

2. What modifications to the present transportation system will be required as a result of the proposed development?

**Slight intersection improvement to Malcomb Drive/ CR540A likely.**

3. What is the total number of parking spaces required pursuant to Section 708 of the Land Development Code?

**25**

4. What are the proposed methods of access to existing public roads (e.g., direct frontage, intersecting streets, and frontage roads)?

A Type 1 Driveway and extension of Gladman Road to south.

## *Sewage*

1. What is the amount of sewage in gallons per day (GPD) expected to be generated by the proposed development?

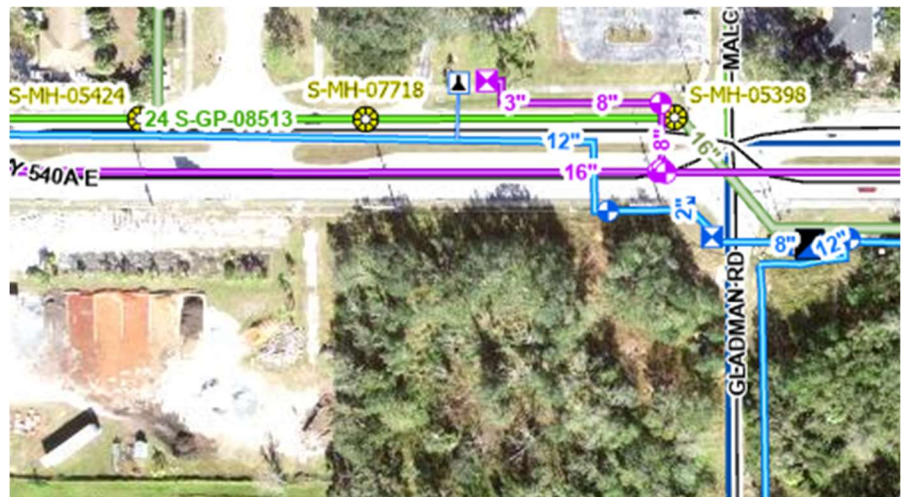
**Table 4**

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Maximum Permitted in the PD	Proposed Plan
4.57 ± acres			
Permitted Density	RL-4 3 du/ac SF = 13 units	INST-1 400 Student Elementary School	Fire Rescue Station Water Treatment Plant
Potable Water Consumption (GPD)	4,680	6,000	1,080
Wastewater Generation (GPD)	3,510	4,800	810

*Source: Polk County Concurrency Manual*

2. If on-site treatment is proposed, what are the proposed method, level of treatment, and the method of effluent disposal for the proposed sewage?

**Connection to Polk County Utilities manhole across the street:**



3. If offsite treatment, who is the service provider?

**Polk county Utilties**

4. Where is the nearest sewer line (in feet) to the proposed development?

**Across CR 540A.**

5. What is the provider's general capacity at the time of application?

**1.726 MGD**

6. What is the anticipated date of connection?

**C/O**

7. What improvements to the providers system are necessary to support the proposed request

**Maybe a private lift station.**

## *Water Supply*

1. What is the proposed source of water supply and/or who is the service provider?

**Polk County Utilities**

2. What is the estimated volume of consumption in gallons per day (GPD)? **1,080 GPD**

3. Where is the nearest potable water connection and re-claimed water connection, including the distance and size of the line?

**Abutting the east side of the site is an 8" line**

4. Who is the service provider?

**Polk County Utilities**

5. What is the anticipated date of connection?

**C/O.**

6. What is the provider's general capacity at the time of application?

**2.344 MGD**

7. Is there an existing well on the property(ies)?

**No.**

### ***Surface Water Management and Drainage***

1. Discuss the surface water features, including drainage patterns, basin characteristics, and flood hazards, (describe the drainage of the site and any flooding issues);

**Tavares Fine Sand and Smyrna-Myakka soils are difficult, but we'll figure it out.**

**Small drainage ditch in the middle of the site is a 100-year flood zone.**

2. What alterations to the site's natural drainage features, including wetlands, would be necessary to develop the project?

**We will need to grade parts of the site and redirect drainage flow across the site.**

### ***Environmental Analysis***

1. Discuss the environmental sensitivity of the property and adjacent property in basic terms by identifying any significant features of the site and the surrounding properties.

**Groundwater table is high. Soils suck. Otherwise, it's perfect.**

2. What are the wetland and floodplain conditions?



3. Discuss location of potable water supplies, private wells, public well fields?

**We will treat before discharge into Christina Basin Drainage network.**

4. Discuss the location of Airport Buffer Zones (if any)

**Over 10 miles away**

5. Provide an analysis of soil types and percentage of coverage on site and what effect it will have on development.

**Tavares Fine Sand 40% north side, Smyrna-Myakka 60%. This forces the station to be closer to CR 540A on the north side.**

### ***Infrastructure Impact Information***

1. Parks and Recreation – **Christina Park one mile, Loyce Harp Park 2 ½ miles**

2. Educational Facilities – **Scott Lake Elementary, Lakeland Highlands Middle, and George Jenkins High School**

3. Health Care – **Lakeland Hospital**

4. Fire Protection – **That's us.**

5. Police Protection and Security – **U.S. Highway 98, 5 miles**

6. Emergency Medical Services (EMS) – **Eventually onsite.**

7. Solid Waste (collection and waste generation) – **County picks it up.**

8. How may this request contribute to neighborhood needs? – **Provides them more services.**